## What is claimed

1. The use of a compound of formula I

wherein A represents O or  $NR_N$ , wherein  $R_N$  is hydrogen or lower alkyl, R is hydrogen or lower alkyl, R' is methyl, methoxy, ethoxy, amino, methylamino, dimethylamino or methylthio, and Z is O or a bond, or a pharmaceutically acceptable salt thereof, for the preparation of a medicament for the treatment of hyperparathyroidism.

2. A method of treating a warm-blooded animal having hyperparathyroidism comprising administering a therapeutically effective amount of an epothilone derivative of formula I

wherein A represents O or  $NR_N$ , wherein  $R_N$  is hydrogen or lower alkyl, R is hydrogen or lower alkyl, R' is methyl, methoxy, ethoxy, amino, methylamino, dimethylamino or methylthio, and Z is O or a bond,

or a pharmaceutically acceptable salt thereof to a warm-blooded animal in need thereof.

3. The method according to claim 2 wherein the warm-blooded animal is a human.

- 4. The method according to claim 2 in which method an epothilone derivative of formula I wherein A represents O, R is methyl and Z is O or a pharmaceutically acceptable salt thereof is administered to a warm-blooded animal in need thereof.
- 5. The method according to claim 4 comprising administering said epothilone derivative weekly in a dose that is between about 0.1 to 6 mg/m² for three weeks after an interval of one to six weeks after the preceding treatment.
- 6. The method according to any one of claims 2 to 5 wherein the hyperparathyroidism disease is adenoma, hyperplasia or carcinoma.
- 7. The method according to claim 6 wherein the disease is parathyroid adenoma, parathyroid hyperplasia or parathyroid carcinoma.
- 8. The method according to any one of claims 2 to 5 wherein the parathyroid cancer disease is recurrent or persistent parathyroid adenoma, recurrent or persistent parathyroid hyperplasia or recurrent or persistent parathyroid carcinoma.
- 9. The method according to any one of claims 2 to 5 wherein the hyperparathyroidism disease is primary or secondary hyperparathyroidism.
- 10. A method for the treatment of hypercalcemia resulting from parathyroid adenoma, parathyroid hyperplasia or parathyroid carcinoma comprising administering a therapeutically effective amount of an epothilone derivative of formula I

$$R$$
 $Z$ 
 $R'$ 
 $R'$ 
 $R'$ 
 $R'$ 
 $R'$ 

wherein A represents O or  $NR_N$ , wherein  $R_N$  is hydrogen or lower alkyl, R is hydrogen or lower alkyl, R' is methyl, methoxy, ethoxy, amino, methylamino, dimethylamino or methylthio, and Z is O or a bond,

or a pharmaceutically acceptable salt thereof to a warm-blooded animal in need thereof.

- 11. The method according to claim 10 wherein the warm-blooded animal is a human.
- 12. The method according to claim 10 in which method an epothilone derivative of formula I wherein A represents O, R is methyl and Z is O or a pharmaceutically acceptable salt thereof is administered to a warm-blooded animal in need thereof.
- 13. The method according to claim 12 comprising administering said epothilone derivative weekly in a dose that is between about 0.1 to 6 mg/m<sup>2</sup> for three weeks after an interval of one to six weeks after the preceding treatment.
- 14. The method according to to any one of claims 10 to 13 wherein the disease is recurrent or persistent parathyroid adenoma, recurrent or persistent parathyroid hyperplasia or recurrent or persistent parathyroid carcinoma.
- 15. A pharmaceutical composition comprising a quantity of compound of formula I

wherein A represents O or  $NR_N$ , wherein  $R_N$  is hydrogen or lower alkyl, R is hydrogen or lower alkyl, R' is methyl, methoxy, ethoxy, amino, methylamino, dimethylamino or methylthio, and Z is O or a bond, or a pharmaceutically acceptable salt thereof, which is therapeutically effective against hyperparathyroidism.

16. A commercial package comprising a compound of formula I

wherein A represents O or  $NR_N$ , wherein  $R_N$  is hydrogen or lower alkyl, R is hydrogen or lower alkyl, R' is methyl, methoxy, ethoxy, amino, methylamino, dimethylamino or methylthio, and Z is O or a bond, or a pharmaceutically acceptable salt thereof, together with instructions for use thereof in the treatment of hyperparathyroidism.